

**REMARKS**

This amendment is filed along with a Request for Continued Examination and Suspension of Action of 3 months.

**Status of the Claims**

Claim 29 is cancelled for being a duplicate claim of claim 24.

Claims 8, 13-16, 24, 27, 28 and 31 remain in this application.

Claim 34 was withdrawn for not being directed to the election made by original presentation.

**Claim Objections**

Claim 26 and 29 were objected to for being duplicate claims.

Claim 29 has been cancelled, and withdrawal of this objection with respect to claim 26 is respectfully requested.

**Claim Rejections-35 USC §103**

Claims 8, 13-16, 24 and 29 stand rejected under 35 USC §103(a) as being unpatentable over ECKBERG et al. US 5,650,453 (ECKBERG '453) in view of BRALEY US 2,811,408 (BRALEY).

Claims 27 and 28 stand rejected under 35 USC §103(a) as being unpatentable over ECKBERG in view of BRALEY, and further

in view of ECKBERG US 4,256,870 (ECKBERG '870) and LOPES et al. US 4,681,714 (LOPES).

Claim 31 stands rejected under 35 USC §103(a) as being unpatentable over ECKBERG '453 in view of BRALEY, and further in view of DMITROFF US 3,321,019.

These rejections are respectfully traversed for the reasons that follow.

**A. Independent claim 8 and dependent claims 13-15 and 31.**

These claims are directed to a mold (for making a heat curable composite material part), which includes a stripping composition. These following differences distinguish claimed invention from the proposed combinations:

**1: "a liquid coating of a  
stripping composition on the mold"**

ECKBERG '453 discloses a composition that is essentially 100% solids. For this reasons, ECKBERG requires the additional components, such as the added solvents, to provide fluidity. See, e.g., column 6, line 35-45 and 56-64, and column 7, lines 3-7. Thus, ECKBERG '453 disclose a solid coating of a composition on a substrate (e.g., an electrical component), which is contrary to a liquid coating on a substrate (mold).

BRALEY also requires additional components for fluidity. BRALEY requires "essential siloxanes" at least at 10% and the solvent for fluidity. See, e.g., column 2, lines 42-50.

Thus, BRALEY fails to remedy this shortcoming of ECKBERG '453 for reference purposes.

DMITROFF teaches forming a composite fiberglass helicopter blade in a mold, and, thus, also fails suggest this feature absent from ECKBERG '453.

**2: "the stripping composition is polymerized by heating...an anti-adhesion modulator constituted by an epoxy polydimethylsiloxane which is not polymerized"**

As explained in the declaration, ECKBERG '453 is polymerized, whereas the claimed coating composition is polymerized when heat is applied to the liquid coated mold itself.

Indeed, there is no suggestion of 5 to 10 parts by weight of an anti-adhesion modulator constituted by an epoxy polydimethylsiloxane which is not polymerized in ECKBERG '453.

**3: "A mold for making a heat curable composite material part comprising a stripping composition on a mold"**

ECKBERG '453 fails to suggest a stripping composition on a mold. Instead, ECKBERG '453 discloses a composition for "a controlled release adhesive surface, or a protective coating or a solvent resistant coating" (Summary of the Invention), which may be applied to electrical components.

While BRALEY may disclose that is known to apply methylpolysiloxanes as release agents on metal molds, BRALEY fails to suggest that "a controlled release adhesive surface, or

a protective coating or a solvent resistant coating" that would be suitable for use as a stripping composition in a mold.

DMITROFF also fails to suggest how the composition of ECKBERG '453 may perform.

That is, there is no finding of fact to suggest that the adherence required to separate a heat curable composite material from "a controlled release adhesive surface, or a protective coating or a solvent resistant coating" would be less than that required to separate the "a controlled release adhesive surface, or a protective coating or a solvent resistant coating" from the metal surface.

**B. Independent claim 16 and dependent claims 24 and 27-29**

These claims are directed to "A method of molding a heat curable composite...comprising: forming a composite material in a mold coated by a liquid stripping composition...the stripping composition comprises...an anti-adhesion modulator that is constituted by an epoxy polydimethylsiloxane which is not polymerized."

That is, this claim recites "forming" the composite material on the liquid stripping composition, and the stripping composition is polymerized by heating. Heat is needed to form a heat curable part in a mold.

As discussed above, ECKBERG '453 utilizes a solid controlled release adhesive surface, protective coating or solvent resistant coating applied to a substrate. There is neither a liquid coating nor a molding action involved. Moreover, as discussed above, there is no suggestion of including an anti-adhesion modulator constituted by an epoxy polydimethylsiloxane which is not polymerized.

While BRALEY may disclose using methylpolysiloxanes as release agents on metal molds, BRALEY is also limited to a solid coating, and BRALEY fails to suggest that "a controlled release adhesive surface, or a protective coating or a solvent resistant coating" would be suitable for use as a stripping composition in a mold.

ECKBERG '870 may teach heat curing release compositions, but ECKBERG '870 also fails to disclose or suggest utilizing a liquid composition as described by the claimed invention.

LOPES discloses coatings for molds contain an organic solvent in order reduce the viscosity of the composition and facilitate the application of the composition to the shape-determining surface. See, e.g., column 4, lines 60-68.

Thus, BRALEY, ECKBERG '870, and LOPES do not remedy the shortcomings of ECKBERG '453 for reference purposes.

### **C. Superior Results**

The advantage of the claimed composition is that the composition is easily spread across the mold (i.e. is not tacky) prior to the application of heat (i.e., as discussed in paragraphs [0009] [0012], [0026] and [0031] of the published application).

The composition does not require a diluent or solvent to make the composition more fluid. Such solvents are removed after application and dumped into the environment (See, e.g., paragraph [0003] and [0023]).

Indeed, due to a high solids content, by both ECKBERG '453 and BRALEY, require the addition of diluents for fluidity.

A signed declaration by Dr. Patrick NOIREAUX, an expert in the field was provided in the appendix of the previously filed amendment supplemental amendment. Dr. NOIREAUX explained why the cited documents cannot teach, or even suggest, the claimed features, and why the claimed features result in superior properties compared to the prior art, and cited documents.

In particular, as pointed out by Dr. NOIREAUX, the composition of ECKBERG '453 and BRALEY would not have been considered "liquid" or "solvent-free". Accordingly, as further explained by Dr. NOIREAUX, the combination based on ECKBERG '453 and BRALEY fails to teach a composition that would provide superior properties of ease of application and suitable for use

with heat curable composite, without the requiring the removal of a solvent.

Therefore, for the two reasons discussed above, the claimed invention is not render obvious by the combination of documents, and withdrawal of the rejection is respectfully requested.

### **Conclusion**

In view of the amendment to the claims, the declaration and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The fee in the amount of \$130.00 for the Suspension of Action is being paid online concurrently herewith by credit card. The RCE fee in the amount of \$810.00 was previously paid online by credit card with the RCE filing on June 9, 2010

Respectfully submitted,

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